BOLL WEEVIL ERADICATION - A BELTWIDE PROSPECTUS Gary Cunningham and Bill Grefenstette USDA - APHIS - PPQ Riverdale, MD

<u>Abstract</u>

The cotton producer's decision to participate in boll weevil (Anthonomus grandis, Boheman) eradication is similar to other investment decisions. He must consider the cost of investing, the time required for the investment to mature, past performance, profit potential, and the risk involved. The investor must also consider his short-term and longterm objectives, and his willingness to wait patiently while those objectives are accomplished. These considerations are reviewed and conclusions are drawn which indicate that boll weevil eradication is a worthwhile investment with a proven track record.

Introduction

The purpose of this presentation is to look at boll weevil eradication as an investment by cotton producers. Previous investment in eradication has yielded an attractive rate of return.

The difficult work of producing a cotton crop involves hundreds of decisions regarding how money is to be spent. Each spring, a list of intimidating and expensive inputs confronts the producer. Some of these expenses are essential, while others may be less critical. The amount spent on pest control is always difficult to project and is subject to dramatic swings from one year to the next. Any strategy which allows the producer to get a handle on these variable and significant expenses will warrant his serious consideration. In many areas of the Cotton Belt, the program to eliminate the boll weevil represents such a strategy. Participation in this program is an investment which producers should consider very carefully.

Investment Considerations

The prospective investor always answers a few basic questions before proceeding. He wants to clarify, in his own mind, his purpose for moving money into a specific endeavor. Regarding weevil eradication, his purpose is clear—he wants to eliminate the primary pest which annually threatens his ability to make a decent crop and a profit. He wants to simplify, for the long-term, his scheme for integrated pest control. And he wants to increase yield and to significantly reduce the amount of pesticides that he must purchase, handle and apply on his farm. Simply stated, he wants to reduce his cost of production and increase his profits. These are the basic reasons for considering an investment in eradication.

Before making his decision the producer also wants to know how much he will be investing. The eradication investment typically involves annual contributions for about five years. In this case, we will call those annual contributions "assessments." After about five years, a modest amount is deposited each year to provide long-term protection for the investment.

Regarding short-term returns on his eradication dollars, the producer will realize improved yield and lower production costs as early as the second year of his investment.

Past Performance

The wise investor also looks at the past performance of any prospective investment. He wants to see how it has done in the past. If the endeavor has proven itself to be successful, there is reason to believe it will be successful in the future.

Considering the past performance of the eradication investment, more than 4.5 million acres in 8 states are now weevil-free. Growers are receiving a rate of return of at least 12 to 1 on their eradication dollars— significantly more in some areas. Integrated pest management strategies are actually working, and working very well, in posteradication areas. The amount of pesticide applied in these areas has been reduced by at least 40 percent, and in many cases as much as 90 percent. Yields in these weevil-free areas have increased because, with Bt cotton and good management, growers are getting a "top crop" which used to be consumed by late-season boll weevils.

The economic and environmental returns from eradication have been impressive, but there can be a few rough spots along the way. In what might be likened to occasional "bear markets," the program has been forced to retreat in a couple areas. Some investors grew uncomfortable early, and terminated their investment. Except for the Lower Rio Grande Valley in Texas, however, the program has rebounded nicely in other areas such as Mississippi.

Over the years, cotton producers have been joined by USDA's Animal and Plant Health Inspection Service (APHIS) as investors in the program. In the early years of the program, APHIS contributed 30 percent, plus capital equipment, to each new eradication area. More recently, as millions of acres have joined the program, the APHIS percentage has been reduced. The total projected program cost on over 2.3 million active acres for 1998 is more than \$85 million. Thirty percent of that amount would require a Federal contribution of about \$26 million, but the actual amount available is \$11 million. This equates to a Federal cost-share percentage of about 13 percent for 1998. The amount is carefully allocated among the active program areas, with input from the National Cotton Council's Boll

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Weevil Action Committee. The committee is comprised of grower leaders from across the Cotton Belt.

In summarizing the program's past performance, we could conclude that there have been many "bull markets," along with a "bear market" or two, but the overall trend on the eradication investment has been upward.

Future Performance

After considering the program's past performance, it would be wise for cotton producers to consider how it might do in the future. While the program has made significant progress, producers of about 7 million acres of the 14 million produced have not yet started their programs. Much work remains to be done in organizing, developing, and implementing the program, especially in the Mid-South and Texas. At the same time, previously infested program areas, which could be viewed as "previous accounts," must not be forgotten. These "accounts" must be serviced each season and protected against reinfestation. We cannot afford to become inattentive toward our previous investments. They must be carefully maintained.

Regarding additional expansion and investment in new areas, we are without a doubt moving into a "bull market." Producers in Oklahoma and Arkansas recently voted to invest in eradication. Oklahoma should start this summer, and Arkansas is hoping for next year depending on what happens in northeast Louisiana. The 3 active programs in Texas have voted, or soon will vote, to reaffirm their earlier commitments. And growers in southwest Tennessee and the south Delta in Mississippi have already voted to begin their programs later this year. The Mesilla Valley of New Mexico and the north Delta in Mississippi are scheduled to vote soon for a start-up in the fall of 1998 and 1999, respectively. It is also possible that northeast Louisiana. and 1 or more additional areas in Texas may vote soon to begin their programs. In short, the stage is set for significant growth from the eradication investment. Undoubtedly, there will be "rallies and corrections" as the program goes forward. But the general trend is upward,

with the strong likelihood of a sizable return on the producer's investment.

Conclusion

The cotton producer's primary objective is to reduce cost and increase profit. In reaching toward that objective, he makes a number of important investments: soil fertility, good equipment, skilled labor, quality seed, weed control, pest control, maybe irrigation, and the list goes on. Every good investment involves some level of risk, whether its the relative safety of a money market fund, or the excitement of the futures market. The investment in eradication also has some risk. But if the technology is not altered significantly from what has worked on over 4 million acres, the risks can be minimized. Rumors of a market crash will always chase a good investment. Potential profit is often lost when we bail-out early.

The investment in eradication will yield the greatest returns to those who are steady and patient, allowing the program adequate time to succeed. Conventional wisdom says that the race does not always go to the swift. Weevil eradication would confirm that statement. Each new area, each new group of investors, will be tempted to modify the technology or to compress the traditional timeframes for eradication. They will do so at their own peril.

In closing, I would encourage all producers who grow weevil-infested cotton to give serious consideration to investing in eradication. For the viability of your industry, and to compete effectively in the world marketplace, trust the technology and give it time to accomplish its purpose. Give it 3 full seasons before passing judgement.

Others may doubt whether eradication is a worthwhile investment. That is O.K.; they can grow beans! Eventually, though, our loudest critics often become our best friends and the program's best salesmen. Boll weevil eradication; it is worth the investment, and has a solid track record to prove it.